# ENGINEERING CHANGE NOTICE DART AEROSPACE LTD

Date: 09.01.20 Job No.:	00:	569	ADR Yes/No: Y ADR Date: 09.01.24	ECN#: 09- 512
Product No.: D412-630			3 (7)	1 CON #. 103- 212
Product Name:			Checked By: General Manager Approval:	
Distribution Regd Resp , In	itial / Da	ten	Distribution Regd Resp	Initial / Date
	ioti		DQA / QA Coord	· · · · · · · · · · · · · · · · · · ·
	29.01		QC Coordinator	
	09.0		Marketing Y SW	1009.01.28
Customer Technical Support Y DSTOW 195		1-27	Customer Order Processing	
B	110101-	-4-11-4:		
Reason for Change: Prevent Cracking in the -047	17-042 In:	stallations		
Documents Affected:				
IIN-D412-630 Rev. M				
ICA-D412-591 Rev. 4				
D2795 Rev B				
D2812 Rev B				
PARTS MUST COMPLY	•	Х	PREVIOUS PARTS SATISFACTORY	<u> </u>
# Quality Assurance Actions	Reqd	Resp	Notes	Complete
1 Notify Previous Customers	N			
2 Notify Eurocopter France	N			
3				
	T = .	Been	Notes	Complete
# Engineering Actions	Reqd N	Resp	(SUPERCEDE)	Complete
Required Documents/Drawings Under Review     Update Product Compatability Matrix	N	-	(SOFERCEDE)	
6 Create Eurocopter Form (FEE)	N	<del> </del>		
7 Notify TC / FAA of Change	N			
		<u> </u>		
# Document Control Actions	Reqd	Resp	Notes	Complete
Move Electronic Files     Update Blue/Pink/DSI Folder and Electronic Files	Y	KJ KJ		09.01.27
	Y	KJ		09.01.28
10 Update Controlled PDF Files 11 Update Master Document List (MDL)	Ϋ́	AJS		09.01.24 435
12 Update Document Record (DR)	ΗŸ	KJ	Kev. Q	1901,27 PU
13 Update Product Development Summary	N			/
14 Update QSI 021 and/or STC Approval List	N			
15 Update Parts / STC Database	Υ	KJ	D2795-3/-4, D2812-043/-044	09.01.27
16 Update / Verify ARC Database	N			
17 Create / Update Change Record Form	Y		ROLL CHANGE NUMBER FOR -011 & -012 TO CHG 007	
18 Create / Update PPP's	Y	KJ		09.01.27
19 Update Document Control Database / Laminated Dwgs 20 Update Grey Project Binder	N Y	KJ		09.01.27 \$
21 Update Grey Project Binder 21 Update D-Part/M-Drawing/DSI/DEO Master Binders	Y	KJ		09 01.27
22	†	<del></del>		10
23				
Description / Action: 630				
RELEASE IIN-D412-630 Rev. M, ICA-D412-594 Rev. 4, D279	95 Rev E	8 & D2812	Rev B.	
D2812-041 & -042 were welded to be replaced by -043 & -04	4 riveted	assamhli	es (See Attached ADR)	
102812-041 & -042 Were Welded to be replaced by -043 & -04-	4 HVCtCu	assembli	es (oce / macrica / 15/1).	
All existing Kits must comply Scap any existing D2812-041 &	042 Scra	ap any ex	isting D2795 -041 , -042, -1 & -2.	
F233			•	
NOTE: Change DSI 9386 & 9353 to "ON REQUEST ONLY".				
1				, .
				0.602/10
		ECN Ve	rified & Complete: Date:	09/04/2

H:\Forms\Engineering\approved online eng\ECNrevN.xls

### DART AEROSPACE LTD.

## **AMENDMENT DESIGN REVIEW (ADR)**

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Part/Installation No.:	D2812	Rev: B	Design Review No.: 1	Date: 09	<del>3</del> .01.14
Project Number:	D412-630	_	Project Description/Title:	Heli Access Ste	эр
Eng. Project Manager:					
· · · · · · · · · · · · · · · · · · ·	Persons Present		Title		Initial
Mike Petsche			Design Manager		
Alan Stocker			Engineering Project Man	ager	MS
David Shepherd			Chief Engineer (DE #02)		
· · · · · · · · · · · · · · · · · · ·			Manufacturing Manager		, , , , , , , , , , , , , , , , , , ,
			Quality Manager		
Peter Hum			Mechanical Designer		Rit

### Comments

D2812-041/-042 Step Assemblies have been redesigned to address concerns over potential cracking where the D2812-1 Step and D2795-X arms are welded together.

This concern was addressed by riveting the arms to steps using D3730-1 & D3741-1 Angle brackets and a combination of solid rivets and blind rivets. This required the creation of new: D2812-043/-044 Step Assemblies D2795-3/-4 Arms and the D2795-043/-044 Arm Assemblies. This resulted in a net  $\sim$  0.47 lbs increase in weight per step.

The D2795-3/-4 arms are similar to the D2795-1/-2 arms they are slightly larger to accommodate the rivets.

Both the IIN-D412-630 & ICA-D412-630 were pictorially updated to show the new step assembly however it should be noted that the new D2812-043/-044 are backwards compatible onto existing installations.

Key Tasks (Check or N/A)	Check	Responsible	Completion Date
Review Outstanding TSR/NCR/CAR/PAR	Y	AJS	
Fill out Criteria/Constraints Form – Inputs	N		
Fill out Project Evaluation Form	N		
D-Part creation/revision	Υ	AJS	
Get Manufacturing Input	Υ	AJS	
First Article Inspection	N		
Fit and Function Test	N		
Structural Test	N		
Reports (Compliance, Loads, Stress, Conformity, DSI)	N		
Check Drawings against all QSIs	Y	AJS	
Review Criteria/Constraints Form	N		
Revision to existing approval	N		
Close Amendment Project	Y	AJS	

### Conclusion:

Proceed with revsion to D2812, D2795, D412-630 & ICA- D412-630 Per ECN